

# FAX TRANSMISSION

GOCHNOUR & ASSOCIATES, INC.

P.O. 3207

ENGLEWOOD, CO 80155

(303)-770-7580

FAX: (303)-721-9298

**To:** Tony Gallegos - UDOG&M      **Date:** January 24, 1997  
**Fax #:** 801-359-3940      **Pages:** 4, including this cover sheet.  
**From:** Lee "Pat" Gochmour  
**Subject:** Tentative Interim Reclamation Costs - Lisbon Valley Project

## COMMENTS:

Mr. Gallegos:

Per Board instructions, I have gone back and worked with the numbers for the first three years of production (See Attached Sheets). I do not have the ability to escalate this number. Does this escalation have to be five years? We will only be in operation for three! Are there any other areas that we can look at?

The acreage will be a little higher. However, costs are very close. Please call and lets discuss.

Pat G.!

cc - Bob Prescott - Summo

Summo USA Corporation

Lisbon Valley Copper Project

M/037/088

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page "ESTIMATE"

San Juan County

Prepared by Utah State Division of Oil, Gas & Mining

**Details of Final Reclamation**

-This estimate is a revision of the 21-Jan-97 estimate by The Winters Co.

-Items which have changed since the 03-Jan-97 estimate are highlighted

Total disturbed area = 1,048.0 acres

Activity	area	Quantity	Units	\$/unit	\$
<b>Waste dump A - 190 acres</b>					
area of top	456,444		SY		
area of slope	462,680		SY		
scarify top (flat) area		456,444	SY	0.20	91,289
12 inches soil on top of dump		152,148	CY	1.25	190,185
12 inches soil on slope		154,227	CY	1.25	192,784
seed entire surface		190	ACRE	174	33,060
<b>Total - waste dump "A" reclamation</b>					<b>507,318</b>

**Waste Dump "B" - 94 Acres - 51 Acres or 54%**

area of top	197,222		SY		
area of slope	258,240		SY		
scarify top (flat) area		197,222	SY	0.20	39,444
12 inches soil on top of dump		65,741	CY	1.25	82,176
12 inches soil on slope		86,080	CY	1.25	107,600
seed entire surface		94	ACRE	174	16,356
<b>Total - Waste dump "B" reclamation</b>					<b>245,577</b>

54% 21,299  
54% 44,335  
27% 29,052  
54% 8,832  
**103,588**

**Waste Dump "C" - 120 Acres - 88 Acres or 73%**

area of top	344,222		SY		
area of slope	238,633		SY		
scarify top (flat) area		344,222	SY	0.20	68,844
12 inches soil on top of dump		114,741	CY	1.25	143,426
12 inches soil on slope		79,544	CY	1.25	99,430
seed entire surface		120	ACRE	174	20,880
<b>Total - Waste Dump "C" reclamation</b>					<b>332,581</b>

73% 50,256  
73% 104,301  
27% 26,846  
73 15,242  
**197,045**

**Leach Pad - 254 Acres - 27% of ore**

**Reclamation of Miscellaneous Areas****Pond Area - 11 Acres**

raffinate pond - 12 inches soil	4,852 CY	1.25	6,065
PLS pond - 12 inches soil	4,852 CY	1.25	6,065
water runoff pond - 12 inches soil	8,229 CY	1.25	10,286
seed 3 pond areas	11 ACRE	174	1,914

Total - Pond Area Reclamation

**24,330** 24,330**Plant & Crusher Area - 25.5 Acres** - 20 Acres or 79%

apply 12 inches soil	41,080 CY	1.25	51,350
seed entire area	26 ACRE	174	4,437

Total - Plant Area Reclamation

**55,787** 44,072**Haul Roads - 40 Acres** 21 Acres or 52.5%

scarify	192,889 SY	0.20	38,578
contour	64,296 CY	1.25	80,370
apply 12 inches soil	67,511 CY	1.25	84,389
seed entire area	40 ACRE	174	6,960

Total - Haul Road Reclamation

**210,297** 110,406**Power Line Corridor - 64 Acres\***

\*Note the Power Co. has requested the power line remain open

64 ACRE n/c

0

**Reseed Soil Stockpile Areas - 40 Acres** 20 Acres or 50%

reseed 40 acres	40 ACRE	174	6,960
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Total - Reseed Soil Stockpile Areas

**6,960** 3480**Fences & Berms\* Around Open Pits**

fence around Sentinel Pit 1	5,620 LF	3.02	16,972
fence around Sentinel Pit 2	2,140 LF	3.02	6,463
fence around Centennial Pit	8,980 LF	3.02	27,120

16,972

6,463

27,120



**DIRECT COSTS**

Mobilization and Demobilization	1 LOT	35,000	75%	35,000	26,250
Leach Pad & Waste Dumps	combined total of previous items			5,533,170	1,501,511
Misc. Surface Areas parking lots & processing areas	combined total of previous items			400,989	248,668
Total Direct Costs				5,969,160	1,776,429

**INDIRECT COSTS**

Plant Dismantling*	1 LOT	450,000	75%	450,000	337,500
*Assumes no salvage value. Dismantling involves removal of above ground above ground structures & the breaking up and burial of concrete foundations.					
<b>Plugging monitoring wells with concrete from bottom to top</b>					
3 of the Navajo wells considered pit de-watering wells					
process area: 5 wells; 4-inch dia, 500 ft	2,500 lf	3 wells	2.20	5,500	3,300
Navajo wells: 6 wells; 6-inch dia, 1200 ft	7,200 lf	4 wells	3.30	23,760	15,840
Engineering - 5% of total direct costs	1 LOT	298,458		298,458	88,821
Owners Cost - - - OMITTED - - -					
* AAs will not be done					
Water quality monitoring for 11 wells 2 samples per well per year for 5 years	110 sample	500	(70 sample)	55,000	35,000
Revegetation monitoring for 5 years	5 year	5,000	27%	25,000	6,750
Construction Management	1 LOT	180,199	27%	180,199	48,653
Contingency (10% of Total Direct Costs)	1 LOT	596,916		596,916	172,643
Total Indirect Costs				1,634,833	713,507
Unadjusted Total Costs				7,603,993	2,489,936
Escalation for 5 years at 2.58%				1,032,853	
TOTAL RECLAMATION COSTS (2002-\$)				\$8,636,846	
average \$/acre cost =				\$8,241	
30% of total reclamation costs (314.4 acres of disturbance)				\$2,591,054	